Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims

1-22 (Cancelled).

23. (Previously Presented): An isolated polypeptide comprising the amino acid sequence of SEQ ID NO: 1 or SEQ ID NO: 14.

24. (Cancelled).

25. (Previously Presented): An isolated nucleic acid molecule comprising a nucleotide sequence encoding the isolated polypeptide of claim 23.

26. (Previously Presented): The isolated nucleic acid sequence of claim 25 comprising the nucleotide sequence of SEQ ID NO: 2 or SEQ ID NO: 13.

27-28. (Cancelled).

29. (Previously Presented): A cDNA clone, comprising an isolated nucleotide sequence according to claim 25.

30-32. (Cancelled).

33. (Previously Presented): A recombinant plasmid for cloning and/or expression, comprising the nucleotide sequence according to claim 25, inserted in a cloning site which is non-essential for replication.

34. (Currently Amended): The recombinant plasmid according to claim 33, further comprising an origin of replication for replication in a host cell, at least one gene whose expression permits selection of said host cell transformed with said plasmid, and a regulatory sequence, including a promoter permitting expression of said [~~nucleic acid~~] nucleotide sequence in said host cell.

35. (Previously Presented): The recombinant plasmid according to claim 33, comprising plasmid pcDNA3 into which is inserted, in a multisite linker, SEQ ID NO: 2, wherein said recombinant plasmid is deposited as CNCM No. I-1795.

36. (Previously Presented): A host cell transformed by a recombinant plasmid according to claim 33, comprising the elements of regulation necessary for the expression of said nucleotide sequence in said host cell.

37. (Previously Presented): The host cell according to claim 36, characterized in that it is a mammalian cell line.

38. (Cancelled).

39. (Currently Amended): A method for assaying a substance for agonist or antagonist activity towards said isolated polypeptide of claim 23, which method comprises:

(a) placing the substance in contact with [~~tissue membrane proteins comprising said polypeptide or~~] a transformed host cell expressing said polypeptide under conditions which permit binding between said polypeptide and an agonist or an antagonist thereto and

(b) identifying agonist or antagonist activity by measuring inhibition of eosinophil chemotaxis; wherein an increase in said inhibition of eosinophil chemotaxis indicates that said substance has an agonist activity and a decrease in said inhibition of eosinophil chemotaxis indicates that said substance has an antagonist activity.

40. (Previously Presented): A process for studying the binding affinity of a compound for said isolated polypeptide of claim 23, which process comprises:

(a) transforming a host cell by an expression vector comprising a nucleotide sequence coding for said isolated polypeptide,

(b) culturing said transformed host cell under conditions which permit the expression of said isolated polypeptide encoded by said nucleotide sequence and the transfer of the expressed isolated

polypeptide to the membrane of the said transformed host cell so that transmembrane sequences of said isolated polypeptide are embedded in the cell membranes of the transformed host cell;

(c) placing said transformed host cell in contact with said compound and

(d) measuring the quantity of said compound bound to said receptor polypeptide.

41. (Previously Amended): A process for studying the binding affinity of a compound for the isolated polypeptide of claim 23, which process comprises:

(a) placing tissue membrane proteins comprising said polypeptide or cells expressing said polypeptide in contact with said compound; and

(b) measuring the quantity of said compound bound to said isolated polypeptide.

42. (Previously Presented): Method of labeling a receptor polypeptide of claim 23, which method comprises:

(a) extracting membrane proteins from a tissue containing said isolated polypeptide,

(b) labeling said membrane proteins with [^{125}I]-ICYP-diazirine or another appropriate marker under blockade of α, β1, β 2, β 3-AR and serotonine receptors,

(c) separating said labeled proteins by preparative SDS-PAGE electrophoresis and

(d) extracting the radioactive band.

43-44. (Cancelled).

45. (Previously Amended): A process according to claim 41, wherein the tissue or cells comprise muscle tissue or myocytes.

46. (Original): A method according to claim 42, wherein the tissue containing said receptor polypeptide comprises rat colon tissue or human skeletal muscle tissue.

47-49. (Cancelled)